

DOCUMENT RESUME

ED 289 858

SP 029 761

AUTHOR Ward, Cynthia A.; And Others
TITLE A Rural State's Future: Issues and Solutions for
Teacher Supply and Demand in Mississippi.
INSTITUTION Mississippi State Dept. of Education, Jackson.
PUB DATE 87
NOTE 46p.
PUB TYPE Reports - Research/Technical (143) -- Information
Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Elementary Secondary Education; Employment Patterns;
Minority Group Teachers; *Teacher Certification;
*Teacher Shortage; *Teacher Student Ratio; *Teacher
Supply and Demand; *Trend Analysis

IDENTIFIERS *Alternative Teacher Certification; Mississippi

ABSTRACT

This study examines the issues of teaching out-of-field and the issuance of emergency certificates in Mississippi school districts as well as student-teacher ratios in schools and the problem of a shortage of minority teachers. The implications inherent in these issues are discussed along with recommendations for solutions to the problems. Data collected from a survey of the schools are presented in tables and charts. Six tables and 12 graphs are included. (JD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

E0209056

A RURAL STATE'S FUTURE: ISSUES AND SOLUTIONS FOR TEACHER SUPPLY AND DEMAND IN MISSISSIPPI

Mississippi State Department of Education
Bureau of Planning and Policy

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. L. Barlow

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☐ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

**A RURAL STATE'S FUTURE: ISSUES AND SOLUTIONS
FOR TEACHER SUPPLY AND DEMAND IN MISSISSIPPI**

Cynthia A. Ward

Susan Hart-Hester

Ron Love

**Mississippi State Department of Education
Bureau of Planning and Policy**

A Rural State's Future: Issues and Solutions
for Teacher Supply and Demand in Mississippi

Within the walls of each classroom may lie both the problems and potential solutions for educational progress in any state -- the teachers. Educational technology at its best may not compensate for the absence of a real "teacher" for young minds. Hence, attention must be given to teachers - past, present, and future - in order to ensure that the supply is adequate and appropriate for the demand.

In recent years there has been a steady decline of people entering teacher training programs, as well as an increasing number of teachers taking early retirement. These unfavorable trends are compounded with other problems, including low salaries and decreased job satisfaction which cause teachers to leave the classroom and pursue other careers (Hawley, 1986).

Architects of the Education Reform Act in Mississippi recognized the importance of annual analysis of teacher supply and demand in order to facilitate planning efforts for staffing state public schools with appropriately certified classroom teachers. This recognition is evidenced by the mandate for the Mississippi Department of Education to annually study and report information about individuals teaching out of their fields of

certification. Therefore, teacher supply and demand issues in Mississippi encompass present problems of students being taught by teachers without proper credentials and those individuals who do not meet all requirements for standard certification. The Five-Year Plan for Educational Improvement, a document developed by the State Board of Education, states that one indication of the lack of certified teachers in Mississippi classrooms is the number of emergency certificates issued (Mississippi Department of Education, 1987).

Complicating the teacher supply and demand issues in Mississippi is the sharp decrease in the number of minority education graduates over the last few years. Such a situation calls for immediate attention to ensure that steps are taken to minimize the possibility of a teacher corp which is less reflective of the present racial composition of the state.

The ultimate goal of Mississippi's education reform is to improve the education system. In order to ensure the success of the reform process, legislative mandates and policy issues affecting every aspect of the education profession have been initiated. School districts must comply with stringent accreditation criteria which examine the effectiveness of the administrative structure and the professional growth of school personnel as well as the adequacy of school buildings and instructional programs. Curriculum changes focused instruction upon the learning of basic skills. Personnel evaluation procedures tied the issuance of a salary increase to successful

demonstration of minimal competency skills, while the completion of district-regulated staff development activities was linked to recertification of school personnel. Each of these areas has fueled both the movement toward excellence within the education profession and the shortage of instructional personnel necessary for implementation of changes mandated by the reform process.

Purpose of the Study

Section 37-3-8(a) of the Mississippi Code directs the State Department of Education to "determine the extent to which teachers are teaching out of their fields of certification; the conditions that promote such a practice; and the most appropriate remedies to the problem" (Supplement to Mississippi Code, p. 16). This study examines the issues of teaching out-of-field and the issuance of emergency certificates in Mississippi school districts, as well as other issues specifically related to teacher supply and demand in the state. The implications inherent in such practices will be discussed along with recommendations for solutions to the problems.

Review of the Literature

According to the National Center for Education Statistics (NCES), school districts in this country will need an estimated one million new teachers between 1989 and 1993 (Plisko & Stern, 1985). Research has shown that "both the number and the proportion of college students preparing to teach has declined precipitously in recent years, while a disproportionate number of teachers are leaving the profession" (Hawley, 1986, p. 712).

Why has there been such a reduction in the teaching force? A study of teacher attitudes by Gallup (1984) suggests nine reasons for leaving the teaching profession. Low teacher salaries, discipline problems in the schools, and the perceived low status of the teaching profession topped Gallup's list (p.101).

Nearly nine teachers in ten who participated in the survey identified low pay as a principal area of concern. A comparative analyses of teacher salaries to earnings in alternative occupations (Bird, Berry, Douglas, & Sciscento, 1985) showed that teacher salaries were below the salaries of nonteaching college-educated workers by as much as \$10,268. Although research has shown that "teacher salaries would have to be increased by about forty percent in order to make teaching competitive on strictly economic dimensions with other occupations and professions" (Hawley, 1986, p. 713), some research recognizes the difference in the contractual period for teachers and that of nonteaching professions (Hecker, 1986).

Salary trends for the various states from 1982 through 1985 show Mississippi with the lowest average teacher salary (\$15,352) among the states; however, current figures indicate that Mississippi teachers earned an average of \$19,575 in 1986-87. This is an estimated 22% increase over the 1984-85 average of \$15,924, although the U.S. average teacher salary was \$26,698 for the 86-87 school year (Nelson, 1987).

An additional influence upon the teaching force is the issue of retirement. According to Watts (1986), "the average age of the teaching force is rising, ... 900,000 of the current 2.3 million teachers are likely to retire or quit teaching during the coming population bulge" (p.723). Data tabulated from a 1985 NCES survey of school teachers showed that 17% or 344,385 of the nation's school teachers are over 51 years of age.

During the 1984-85 and 1985-86 school years, Mississippi had an estimated 351 teachers retire from the field. Although 681 new teachers entered the pool of 24,214 teachers for school year 86-87, differing areas of endorsement and choice of living sites continued to influence the practice of teaching out-of-field in Mississippi.

In 1985 the Council for Basic Education studied the assignment of teachers in our nation's schools and indicated that "thousands upon thousands of children" are being taught by teachers who are not endorsed in their major area of assignment. During the 1983-84 school year, 3.4% or 88,260 of all teachers were assigned to teach in an area outside of their area of

endorsement (Plisko & Stern, 1985). The endorsement areas most affected were: bilingual education, special education, computer science, vocational-education, science, and math. Additionally, an estimated 26,300 teachers or 12.4% of the newly hired teachers for school year 83-84 were not endorsed in their major area of assignment (Ibid, 1985). According to recent figures released by NCES (1987), 6% of the teachers in the 1985-86 teaching force indicated that they were teaching one or more subjects for which they were not endorsed.

As the nation's schools continue to experience teacher shortages, such practices as teaching out-of-field and emergency certification will "become more widespread" (Roth, 1986). School districts within Mississippi are proving to be no exception to this practice. During the 1986-87 school year, an estimated 2405 periods per day were taught by uncertified individuals and 952 persons taught in Mississippi classrooms using emergency certificates.

Data Collection Procedures

Data for this study were collected through school personnel audits and accreditation instrumentation. A synthesis of the 1986-87 data regarding teaching out-of-field and emergency certificates and information compiled from the 83-84 and 84-85 school years is discussed. The Certification Division of the State Department of Education defines teaching out-of-field in two ways: 1) when a teacher teaches a class that he/she is not certified to teach and 2) when emergency certificates are issued

to teachers. Information regarding these two types of teaching out-of-field is presented in narrative and table format.

RESULTS

Teaching Out-of-Field

The data displayed on Table 1 indicate that the total number of instructional periods per day taught by uncertified teachers has dropped from both the 83-84 and 84-85 figures. During school year 86-87, approximately 2405 periods per day were being taught by individuals not certified in the area of assignment. Data collected during the 83-84 school year showed a total of 3273 periods per day being taught by uncertified personnel. This overall decrease may have resulted from the implementation of stricter accreditation procedures which monitor the teaching credentials of school personnel, as well as the availability of scholarships for critical need subject areas beginning with math and science.

Despite the promise shown by a continuing downward trend in the number of periods per day taught by uncertified teachers, the 86-87 data show six areas of critical shortage: elementary (self-contained), English, general science, mathematics, remedial reading, and kindergarten. More than 200 periods per day were taught in each of these six areas by persons not certified in the major assignment. A period is defined as a period of time during the teaching day; generally the teaching day has six 55 minute periods or seven 50 minute periods (Bulletin 171, 1987).

Because the aforementioned six areas represent critical foundation disciplines for Mississippi youngsters, the effects of instruction by uncertified teachers upon student achievement must be examined. As Mississippi's accreditation system moves toward the assessment of outcome measures, the impact of these "misassigned" teachers upon the learning process must be considered.

Mississippi's 1982 Education Reform Act mandated that school districts implement kindergarten programs for preschool youngsters; therefore, the large number of uncertified teachers assigned to this area is not surprising. The number of youngsters served by Mississippi public schools increased by an estimated 30,000 over 85-86 figures. Approximately 25,000 more youngsters participated in 1986-87 Reform Act kindergarten programs than were served during the 85-86 school year.

Emergency Certificates

Overall, cumulative figures for the number of emergency certificates issued to Mississippi teachers have evidenced a downward trend from 79-80 to 86-87 (See Graph 1). Local school district attention given to more stringent accreditation requirements may have contributed to this decline.

Although the overall trend evidenced a decrease in the total number of emergency certificates, several areas did experience an increased number of emergency certificates. Emergency certificates issued in the area of educationally handicapped evidenced a thirteen percent increase over the 84-85 figure;

i.e., 308 to 353. Other areas experiencing an increase in the number of emergency certificates are: 1) vocational education categories, with an increase of 20%, 113 to 141, and 2) speech-language clinicians which rose 22% over 84-85 figures, 49 to 63.

Data for the 86-87 school year indicate a number of emergency certificates issued in the elementary education areas. Again, as with the number of periods taught by uncertified teachers, this increase may be indicative of the larger number of children being served by schools in Mississippi.

The national school age population is expected to increase by as much as 13% between 1984 and 2000. This expected increase is already presenting itself in the number of youngsters served during the 86-87 school term. The number of youngsters served by Mississippi school districts during the 85-86 school year was 470,734, with the number increasing to 498,639 during the 86-87 school term. The majority of this increase was due to the number of youngsters participating in kindergarten programs throughout the state. A comparison of other categories of emergency certificates across the 84-85 and 86-87 school years indicates a more stable trend.

DISCUSSION

Teaching out-of-field is not a new phenomenon among public school districts. The practice of assigning teachers to areas in need of staffing has been an avenue consistently used by districts in response to teacher shortages, and merely reviewing the practices used to circumvent the teacher shortage does not

help districts ameliorate the problem. The evident lack of certified teachers to fill positions within the education field must lead to speculation about conditions which may promote this critical shortage of personnel.

The issues of low salaries, the perceived low status of the profession, and the decreasing number of persons entering education programs were cited earlier in this paper; however, it is important to note that these issues continually ranked at or near the top of research lists regarding teacher concerns. Additionally, increased career opportunities for women and minorities have decreased the pool of available teachers. Moreover, research has shown that the lack of job incentives and opportunities for advancement are conditions which add to the shortage of personnel. However, Sykes and Devaney's 1985 research regarding teacher supply and demand issues indicates that the problems of recruitment and retention of teachers extends "beyond the ups and downs of the job market to the nature of the work itself and to the conditions that teachers face in the schools today" (p. 243).

Conditions within Mississippi's schools which served to increase the practice of teaching out-of-field were addressed in part through an 84-85 survey of teachers and administrators. Individuals responding to the survey listed class overloads/underloads, districts offering more Carnegie units, and unavailability of certified personnel as the major reasons for the continued practice of teaching out-of-field (See Table 3).

Although the administration of the survey did not occur during the 86-87 school year, information regarding class overloads and availability of teachers to fill positions can be addressed through alternate data sources. Information regarding pupil-teacher ratios is collected by the accreditation instruments, while the Certification Division of the State Department of Education tracks the number of certified teachers in each instructional area.

Class Overloads

Standard 11, requirements 100-104, of The Requirements of the Commission on School Accreditation deal with the issue of pupil-teacher ratios. Data collected through the accreditation monitoring process indicated that 877 or 4% of Mississippi's teachers taught classes in which the pupil-teacher ratios exceeded one of the following:

100. Twenty-two to one in kindergarten, except in instances where an assistant teacher is in the classroom. If an assistant teacher is employed, twenty-seven pupils may be enrolled.
101. Twenty-seven to one in classrooms serving grades one through four.
102. Thirty to one in self-contained academic core classes serving grades five through eight.
103. Thirty-three to one in departmentalized academic core classes serving grades five through twelve.
104. One hundred and fifty students per day maximum student load for teachers of academic core classes in grades five through twelve.

Class size has become a debatable issue for researchers and educators alike. Nationally, secondary school teachers have five

class periods a day with as many as forty students per class. It is not surprising that teachers identify their decreased satisfaction with the work place (Shanker, 1985) as another reason for leaving the teaching profession. Large classes, along with other assigned tasks, have contributed to teachers decreased satisfaction with the work place.

Table 4 shows statewide totals of classroom overloads by instructional area. An excessive number of elementary classrooms, 679, served more students than the law prescribed. As the school age population increases, class overloads will be a difficult issue for administrators to resolve. To maximize instructional personnel will call for strategic recruiting, hiring, and assignment by school administrators.

Minority Teachers in Mississippi

Another area related to an adequate, appropriate teaching force is the number of minority group individuals entering the teaching profession. At a time when black educators are in limited supply in many Mississippi communities, blacks are insisting that their local boards of education hire more black teachers.

According to the American Association of Colleges for Teacher Education (AACTE), minority men and women account for an estimated 11% of the nation's teaching force. In Mississippi, minority men and women compose an estimated 10% of the teaching force. Although Mississippi's minority percentage of teachers is comparable to the national percentage, continuous attention must

be given to ensuring that this number does not decline while efforts are established to increase the number of minority teachers in the work force.

Mississippi's efforts to improve the quality and qualifications of the teaching force have resulted in the introduction of four new standards of eligibility for entry into the teaching profession: (1) completion of a 44-hour college core curriculum, (2) a grade point average (GPA) of at least 2.50, (3) completion of the University College Outcome Measures Program (COMP test), and (4) satisfactory scores on National Teachers Examination (NTE).

Developed by the ACT Corporation, the COMP test serves as a projective measure of a student's potential, examining the general achievement abilities of freshman and sophmores in college. Successful completion of the COMP or a comparable test such as the NTE may pose the greatest obstacle for potential black teachers. Of the 677 blacks who took the COMP exam prior to the fall of 1984, five hundred and fifteen did not pass. Therefore, 76% of the blacks interested in pursuing teaching as a career were unable to successfully complete prerequisites for entrance into a teacher education program in Mississippi (Peoples, 1984; State Department of Education, Five-Year Plan for Educational Improvement, 1987). Thus far, limited attention has been given to providing assistance to students who do not pass the COMP test.

The State Education Agency in Maryland found similar results

during a 14-month trial period in which half of the black college graduates who took the NTE did not pass. As of July 1, 1987, Maryland officials are not issuing a teaching certificate to persons who do not earn passing scores of at least 50 percent on all sections of the NTE. Data from Arkansas and Louisiana indicate similar results pertaining to use of the NTE (ED-LINE, September 16, 1987).

Graph 2 shows the decreasing trend of black graduates receiving first-time teaching certificates in Mississippi. The impact of standardized test requirements for entering teacher education programs, as well as for issuance of teaching certificates to minority students should be closely monitored before these requirements result in a teacher corp which is even less reflective of the present racial composition of the state.

Solutions to the Problem

The shortage of certified persons to teach youngsters in our nation's schools is a recurring problem. In the past, the solution to teacher shortages has been to lower, and in some instances, eliminate certification requirements for entry into the teaching profession. However, the public's growing concern over the quality of the instruction afforded students has decreased the use of this solution. Greater emphasis has been placed on attracting and keeping qualified teachers in the profession through salary increases, career ladders, and merit pay plans. Yet, the efficacy of the aforementioned solutions on attracting and retaining quality teachers has not been proven

(Berry, 1985).

Mississippi educators who responded to the 1984-85 survey suggested that teaching out-of-field could be remedied by requiring dual certification for instructional staff. Certainly, if the number of dually certified instructional staff increased, then administrators would have greater flexibility in scheduling teaching assignments; however, care would have to be taken in order to guide teachers into areas of greatest need. Administrators must give as much attention, if not more, to the placement of instructors as they give to the placement of students.

Currently, over 27,499 of the 52,710 individuals holding valid teaching certificates in Mississippi are certified in more than one endorsement area. As the number of school age youngsters increases, administrators should consider endorsing the practice of hiring and assigning dually certified individuals into areas of greatest need. Additionally, administrators who hold endorsements in one or more instructional areas may be called upon to teach on a limited basis. Of the 3,763 individuals certified in administration, 197 hold biology certificates; 218 have general science certificates, and 194 are certified to teach math in grades 7-12.

Administrators participating in the 84-85 survey suggested retraining staff in critical areas such as math and science as a viable solution to the problem of teacher shortages. Currently, 2,736 individuals are endorsed in math in grades 7-12

and 2,920 are certified in general science. Compared to the nearly 200,000 secondary students served by Mississippi school districts, these numbers reflect the shortage of properly trained instructional staff, yet, little, if any, attention is given to this problem in many local staff development programs. Although incentive programs for retraining and entry into the fields of math and science have been instituted through the Education Reform Act and some federally funded programs, the impact of these programs upon districts attempting to fill teaching positions in critical discipline areas has not been examined.

Additional solutions to the teacher shortage and the subsequent practice of teaching-out-of-field include the use of part-time teachers and shared-time plans. Of the 52,710 persons in Mississippi holding a valid certificate, only an estimated 24,000 are working in the teaching profession. If part-time teaching and shared-time plans were instituted, districts might be able to attract at least a limited number of these individuals back into the field.

CONCLUSION

As indicated earlier, the need for more teachers in Mississippi's schools is evidenced by the large number of emergency certificates issued and the number of teachers assigned to teach outside of their area of endorsement. As the number of youngsters being served by the schools increases, the problem of attracting and retaining qualified staff will become more pronounced. Administrators must examine the feasibility of

retraining staff to serve in areas where shortages exist. However, such a solution raises the issue of funding for continued training. Who should pay for the teacher to return to school? If the district benefits from the added expertise, should the district cover tuition costs? If the district pays, should the teacher be required to teach in that district for an assigned period of time?

In the past teachers were required to earn college credit in order to maintain their certification. If teachers used these college credits to add endorsement areas, then surely the districts and the teachers benefitted. Therefore, it is necessary to examine more closely the implications of the change in the State's certification process; i.e., requiring teachers to participate in district staff development activities rather than earning college credits.

The problem of teacher shortages should also be addressed through an examination of the entry requirements for the education programs of the State institutions of higher learning. Obviously, a decrease in the quality of the training offered through education programs is not advocated, although a review of the effects of entry requirements upon minority populations is recommended. This review is also needed in the area of certification requirements.

Hawley (1986) states that "regulatory policies; i.e. tests, a priori admissions, requirements and other screening devices, will neither reduce the teacher shortage nor bring better

qualified people into teaching, because they do not alter significantly the rewards for teaching" (p.714). Indeed, Gallup's 1984 survey of teacher attitudes toward the profession support such a claim. The intrinsic rewards no longer outweigh the economic necessity for increased salaries, career advancements, and job benefits such as health and dental plans.

In order for the number of misassigned teachers to decrease, the teaching force must increase its ranks with dually certified staff in such areas as elementary education, mathematics, and science. However, as the number of dually certified teachers increases, administrators must ensure that careful attention is given to the classroom assignment of teachers in order to best meet student needs.

The creation of a task force on the teaching profession should provide the groundwork for extensive review of teacher supply and demand issues including recruitment, scholarships, induction, improvement of the workplace, appraisal, recognition, and professional development, along with other issues discussed in this paper. With most reform programs now institutionalized, continued improvements in the state's educational system can focus on the specific efforts to secure and maintain a quality teaching force, as well as working toward improving the profession of teaching. Such efforts are absolutely necessary to ensure the success of lasting educational reform.

Recommendations

The following is a list of recommendations regarding the issues of teacher supply and demand in Mississippi:

1. Although the number of individuals teaching out-of-field and holding emergency certificates has declined, the State should continue to monitor these areas through both the accreditation system and the certification process.
2. Because a large number of uncertified individuals have been assigned to teach English, math, science, remedial reading, and elementary education, the impact of these "misassigned" teachers upon the learning process should be considered.
3. The need for special education teachers is evidenced by the increase in the number of emergency certificates issued in the area of educationally handicapped. As new federal laws mandate the provision of educational services for preschool handicapped youngsters, the need for properly endorsed special education teachers will increase. Therefore, institutions of higher learning should encourage education majors to pursue initial certification and even dual certification in this special need area.
4. As the school age population increases, particularly in the elementary grades, administrators should emphasize the recruitment and placement of dually certified personnel.
5. A dissatisfaction with the work place due in part to classroom overloads and misassignment of teaching tasks has many teachers leaving or threatening to leave the profession. Corrective actions must be required of the districts to decrease the likelihood of continued classroom overloads and misassignment of personnel. A district's five-year plan should address projections for student population, certified staff, and availability of classroom space.
6. Teacher salaries should be increased, with consideration given to a review of career ladder and merit pay plans.

7. The teaching force in Mississippi is becoming less representative of the present racial composition of the state; therefore, attention should be given to the number of minority students entering teacher education programs. Moreover, careful review of the impact of the COMP test on prospective minority teachers is needed. In addition, the impact of standardized test requirements for entering teacher education programs should be closely monitored.
8. The impact of incentive programs for retraining and entry into the fields of math and science should be examined.
9. The feasibility of part-time teaching and shared-time plans should be examined.
10. The impact of the change in the State's certification process, requiring teachers to participate in district staff development rather than earning college credits, should be examined.
11. The effectiveness of teachers certified through alternate routes should be examined.
12. Additional review of teacher supply and demand issues, including recruitment, scholarships, induction, improvement of the work place, appraisal, recognition, certification, and professional development, should be implemented by the task force on the teaching profession.

References

- Berry, B. (1985). Toward a better understanding of the teaching labor market in the southeast: A synthesis of qualitative research. Occasional Papers, 2(2), Columbia, SC: University of South Carolina.
- Bird, R., Berry, B., Douglas, S., and Sciscento, S. (1985). The dynamics of the teacher labor market in the southeast. Selected Monographs in Educational Policy Research No. 3. Washington, D.C.: U.S. Department of Education.
- ED-LINE (September, 1987). Half of black college graduates fail MD. teacher test.
- Gallup, A. (1984). The Gallup poll of teacher's attitudes toward the public schools. Phi Delta Kappan, 66(2), 97-107.
- Hawley, W. (1986). Toward a comprehensive strategy for addressing the teacher shortage. Phi Delta Kappan, 67 (10), 712-718.
- Hecker, D. (1986). Teachers' job outlook: is chicken little wrong again? Occupational Outlook Quarterly 30 (4) pp. 13-17.
- Mississippi State Department of Education. (1987). The requirements of the commission on school accreditation: Policies, procedures and standards. Jackson, MS: Author.
- Mississippi State Department of Education. (1987). The five-year plan for educational improvement. Jackson, MS: Author.
- National Center for Education Statistics. (1986). The 1985 Public school survey, early tabulations. Washington, D.C.: United States Department of Education.

Nelson, F.H. (1987). Survey and analysis of salary trends 1987.

Washington, D.C.: American Federation of Teachers.

Peoples, J. (1984). The exodus of blacks from the teaching profession in Mississippi.

Plisko, V.W. and Stern, J. (1985). The condition of education.

Washington, D.C.: U.S. Government Printing Office.

Roth, R. (1986). Emergency certificates, misassignment of teachers, and other "dirty little secrets". Phi Delta Kappan, 67 (10), 725-727.

Shanker, A. (1985). The revolution that's overdue. Phi Delta Kappan, 66(5), 311-315.

Sykes, G. and Devaney, K. (1985). A blight on the apple for teacher. Education and Urban Society, 17, 243-249.

Watts, G.D. (1986). And let the air out of the volleyballs. Phi Delta Kappan, 66(2), 97-107.

TABLE 1 -- State Totals for the Number of Periods per Day Taught by Teachers Not Certified in the Area of Assignment

Area of Assignment	No. of Periods			Area of Assignment	No. of Periods		
	83-84	84-85	86-87		83-84	84-85	86-87
Elementary (Self-Contained)	373	368	292	Intensive Business Training	6	6	6
Agriculture	11	11	--	Journalism	35	33	--
Art	14	12	21	Latin	14	15	1
Bible	2	2	2	Learning Disabled	52	67	39
Biology	159	152	92	Mathematics	390	384	217
Business Education	13	15	17	Media-Librarian	3	3	--
Chemistry	87	76	62	Mentally Retarded	12	46	66
Coor. Dist. Education	1	0	--	Music Education	60	71	63
Distributive Education	0	5	--	Occup. Child Care	1	1	--
Driver Education	17	11	9	Occup. Orientation	17	32	6
Earth Science	46	36	87	Physically Handicapped	3	3	--
Educationally Handicapped	16	11	--	Physics	78	78	46
English	226	267	203	Psychology	17	17	9
French	73	75	21	Remedial Reading	201	95	325
General Science	396	375	284	Social Studies	469	439	196
German	8	12	6	Spanish	55	63	52
Gifted	10	0	12	Speech Communication	75	50	49
Guidance	3	0	--	Trade	21	12	--
Hearing Impaired	2	0	4	Visually Impaired	6	6	--
Health & Physical Education	277	255	177	Voc. Prep. for Handicapped	15	11	34
Home Economics	5	4	7				
Industrial Arts	5	0	--	TOTAL	3273	3119	2405*

*Additionally, the following areas were taught by teachers not certified in the area of assignment: Accounting (4), American Government (4), Computer Education (8), Emotionally Handicapped (4), Kindergarten Teacher (237), Language Arts Ch. 1 (188), Russian (2), Shorthand (2), Typewriting (9), U.S. History (11), and World History (20).

Period = a period of time during the teaching day; generally the teaching day has six 55 minute periods or 7-50 minute periods.

TABLE 2 -- Number of Emergency Certificates in Various Areas of Certification

Area of Certification	# of Emer. Cert.			Area of Certification	# of Emer. Cert.		
	83-84	84-85	86-87		83-84	84-85	86-87
Art	3	2	2	Mathematics	40	50	32
Biology	18	15	11	Mentally Retarded	14	11	5
Chemistry	2	11	11	Physical Education	2	8	4
Educationally Handicapped	236	308	353	Physically Handicapped	2	2	9
Emotionally Handicapped	5	5	2	Physics	2	3	4
English	15	15	20	Reading	24	30	34
French	4	10	9	Social Studies	7	10	18
General Science	29	28	24	Spanish	6	9	10
Gifted	21	29	19	Speech Correction	1	1	2
Guidance	2	5	3	Speech Language-Clinician	47	49	63
Hearing Impaired	2	4	5	Trade	107	105	118
Librarian	14	18	11	Visually Impaired	1	1	2
Learning Disabled	8	9	6	Vocational Counselor	<u>3</u>	<u>8</u>	<u>23</u>
				TOTALS	615	746	804*

*There were 148 emergency certificates awarded in other areas during 1986-87 that are not indicated on this Table.

TABLE 3 -- Condition(s) for Teachers Having Assignment(s) Out-of-Field of Certification in Forty (40) Randomly Selected Schools (100% return)

Condition	Number of Teachers			
	1983-84	Percent	1984-85	Percent
Offering as many carnegie units as possible--thus some are teaching in several areas	35	24%	32	23%
Overload	56	39%	38	27%
Underload	16	11%	21	15%
Extracurricular activities scheduled during the school day	7	5%	12	8%
Administrative prerogative	12	8%	10	7%
Too few teaching units	4	3%	4	2%
Scarcity of teachers in various areas	17	12%	19	13%
Departure of regular teacher after school begins	0	0%	0	0%
Money not available to employ teacher	0	0%	1	0%
TOTALS	143	102%	137	95%*

*Does not equal 100% due to "rounding off."

TABLE 4
Statewide Totals of Overloads
in Class Enrollments by Area
1986-87

Assistant Reading Instructor	20
Business Education	5
Elementary Self-Contained	679
English/Language	20
English/7th Grade	3
English I	4
English II	2
English III	1
English IV	3
Mathematics	26
Advanced Math	1
Algebra I	2
Algebra II	2
Geometry	1
Reading, Development	5
Biology	9
Earth Science	3
General Science	20
Social Studies	35
U. S. Histroy	10
World History	2
Remedial Reading (Ch. I)	3
Counselor	1
Remedial Related (Vocational)	2
Coach of Athletics	3
Total	862

TABLE 5

Number of Certificates Issued through
Alternate Routes 1986-87

<u>Area</u>	<u>Alternate Route</u>	<u>Testing-Out</u>
Art	3	1
Biology-General Science	26	25
Business Education	3	3
Chemistry-Physics	8	15
Educ. Handicapped	--	50
Elementary Education	35	167
English	24	10
French	3	--
German	1	2
Health & P. E.	--	4
Home Economics	1	--
Industrial Arts	--	2
Kindergarten	--	40
Mathematics	14	7
Music Education	3	2
Social Studies	12	12
Spanish	3	4
Special Education	2	--
Speech	1	4
Library-Media	<u>1</u>	<u>1</u>
Total	140*	349

*Only 134 teachers hold provisional certificates. Five of these hold multiple endorsements.

Alternate Route = Initial certification received by testing at or above the 51st percentile on the NTE.

Testing-Out = Holders of standard teaching certificates add other areas of endorsements by testing at the 51st percentile on the specialty areas of the NTE.

TABLE 6

CORRELATION OF DISTRICT SIZE,
TEACHING-OUT-OF-FIELD AND
STUDENT ACHIEVEMENT ON FLE

DS	DS	TOF	FLE (COMP)
TOF	.5906	1.0	.1051
FLE (COMP)	.0806	.1051	1.0

FLE $\bar{X}$ = 761.90
SD = 32.79

TOF $\bar{X}$ = 5.55
SD = 5.20

DISTRICT SIZE $\bar{X}$ = 3145.9
SD = 3114.92

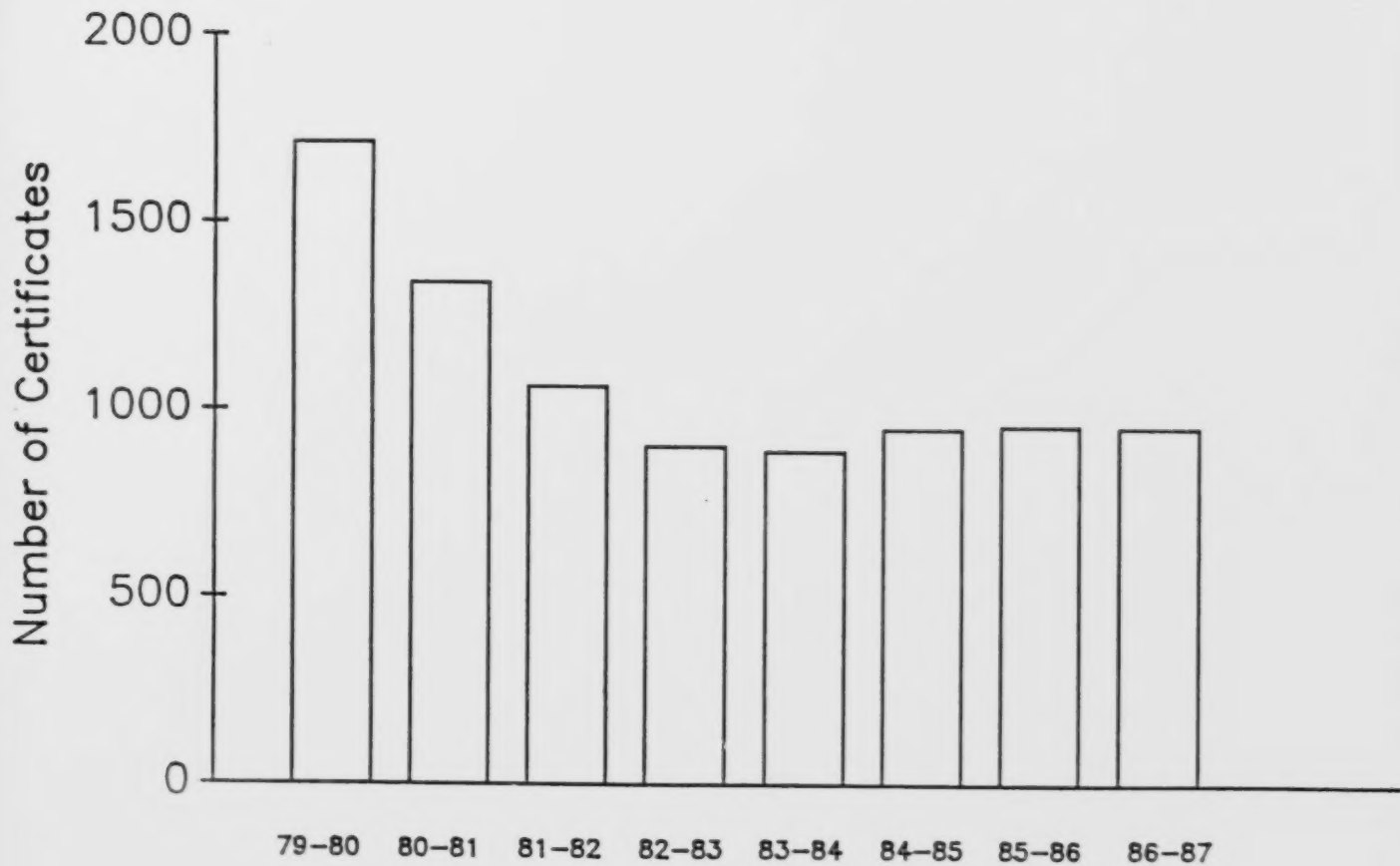
SIGNIFICANCE LEVEL .001

DS = DISTRICT SIZE

TOF = TEACHING-OUT-OF-FIELD

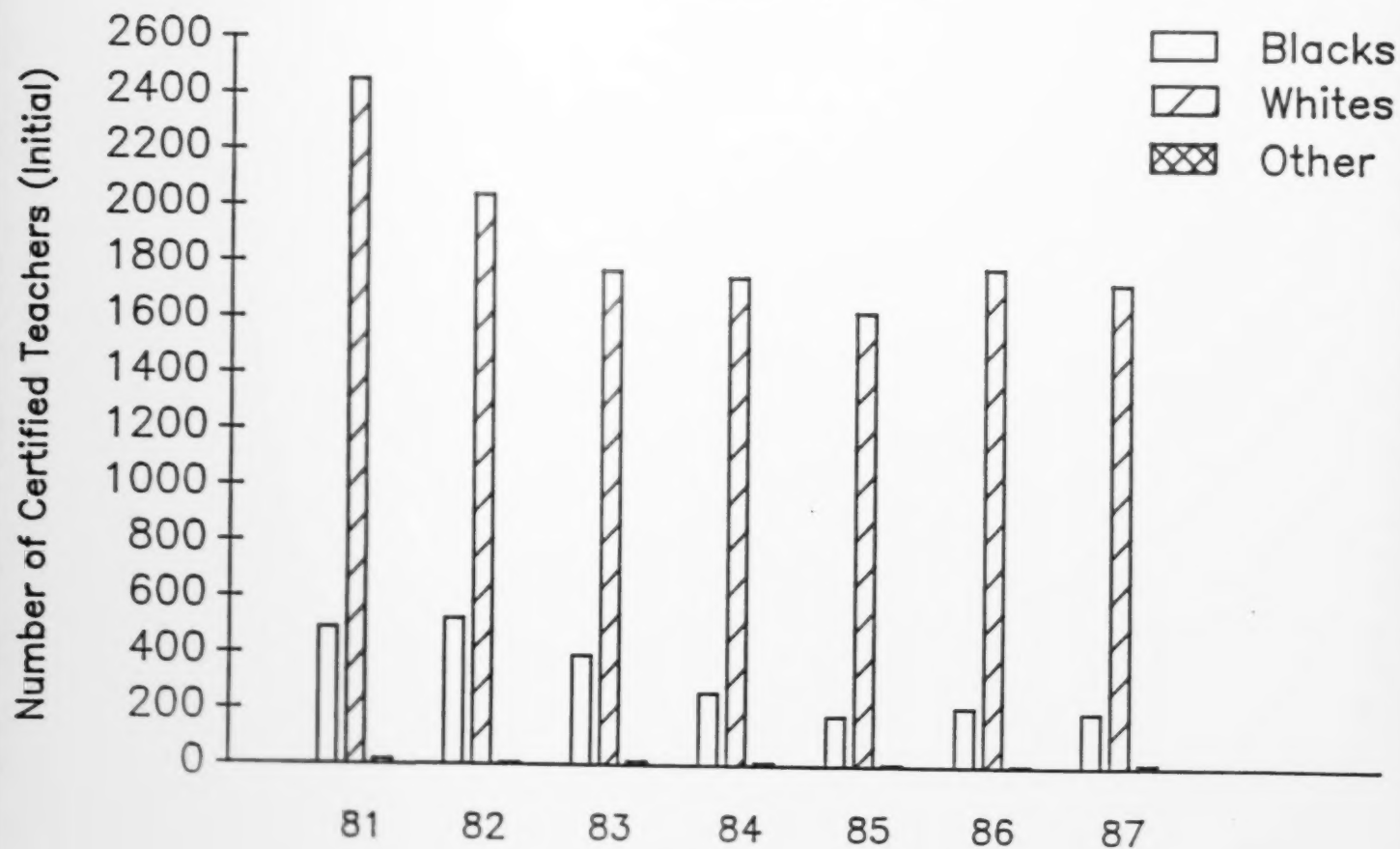
FLE = FUNCTIONAL LITERACY EXAMINATION

Graph 1
Number of Emergency Certificates
Issued in Mississippi 1980-87

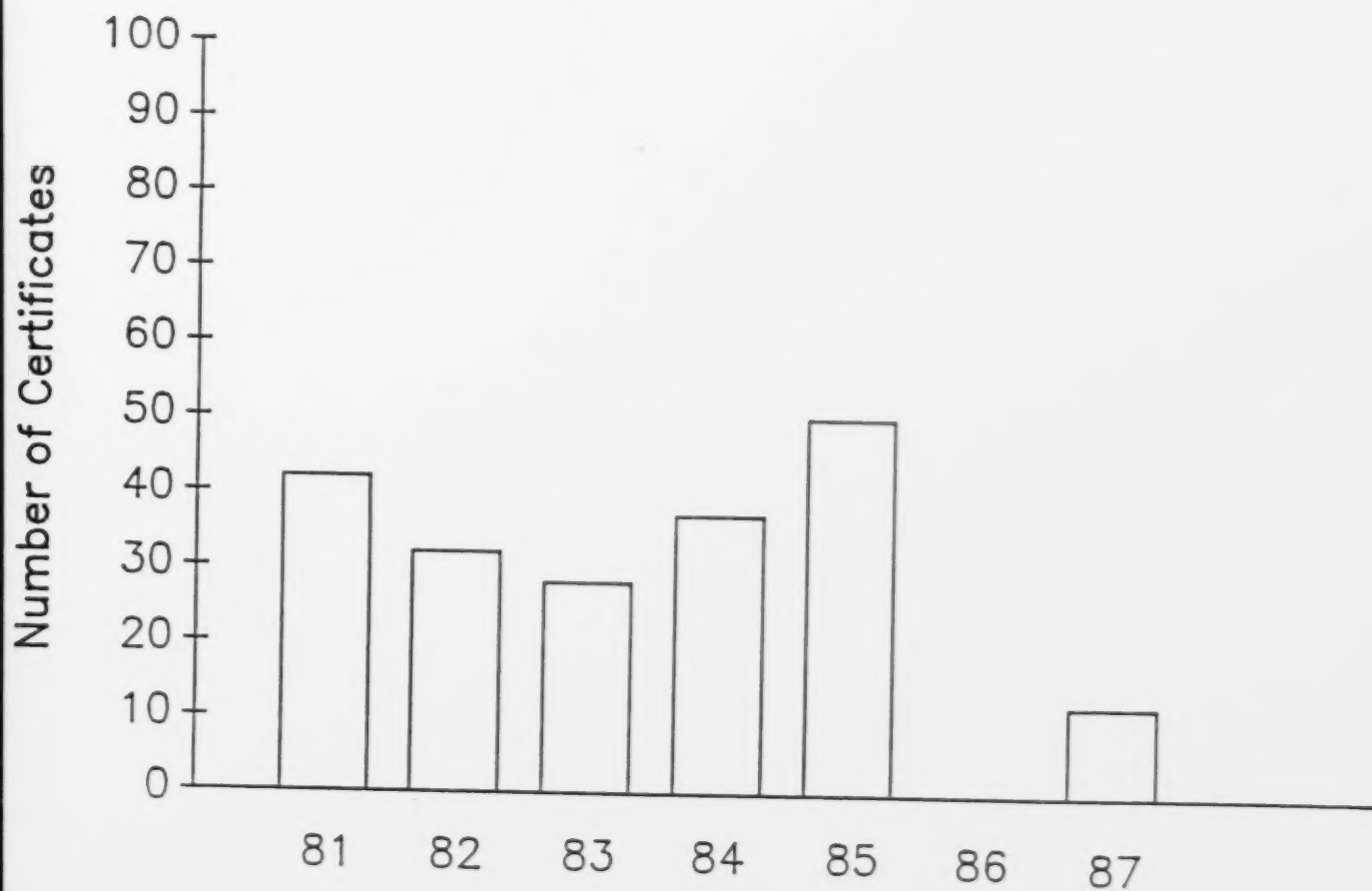


Graph 2

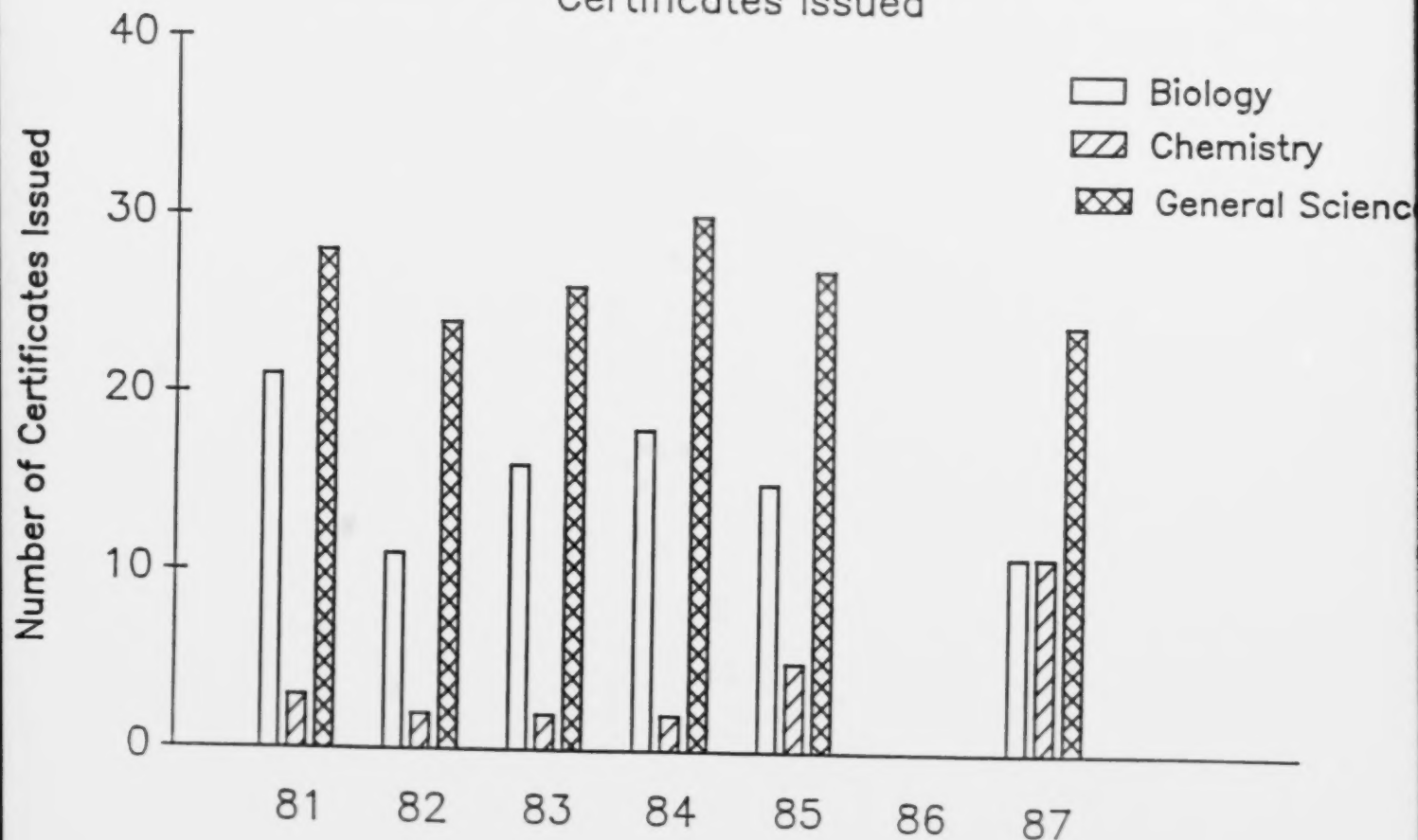
Number of New Certificates (Initial)
Issued by Race



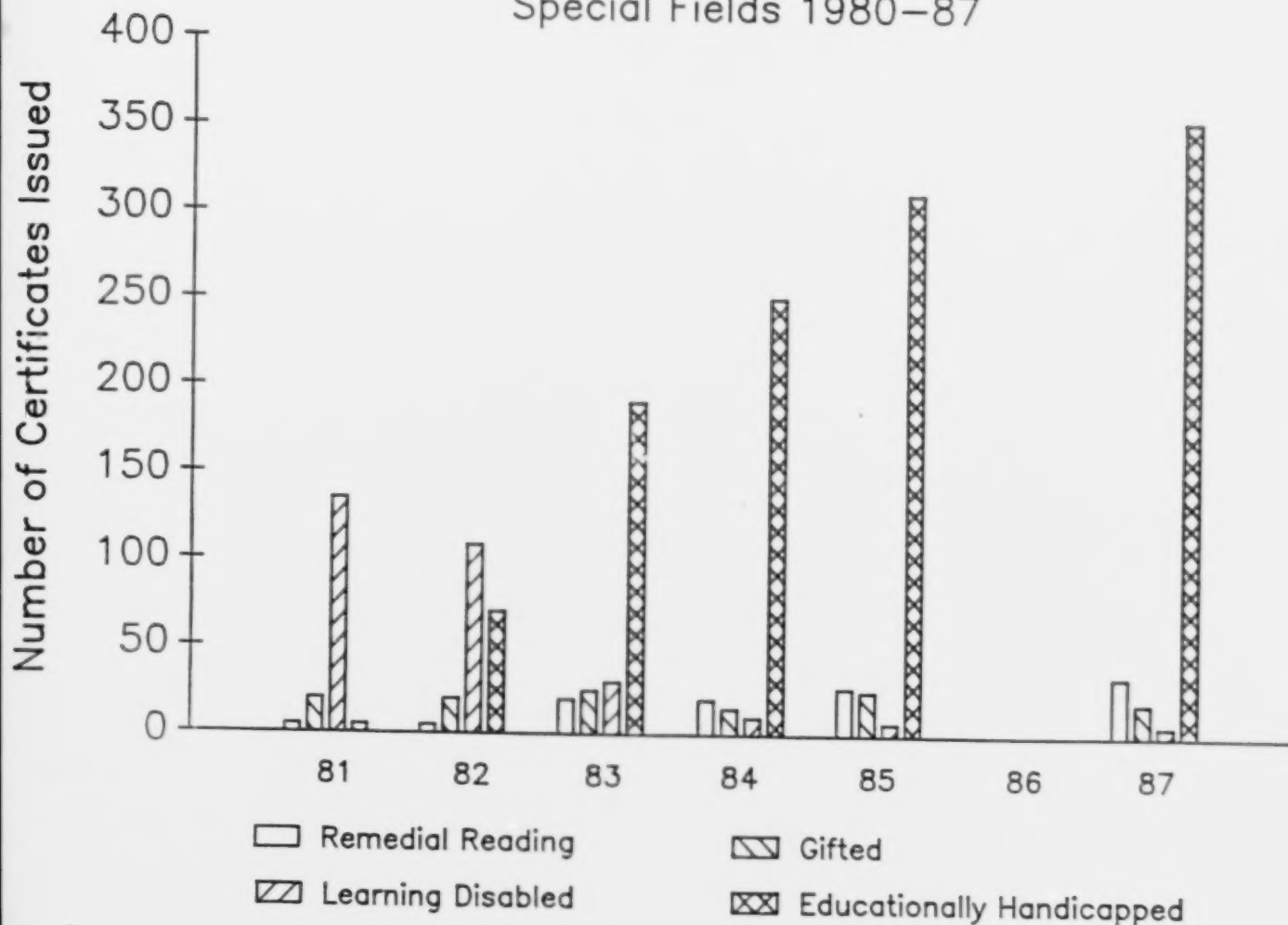
Graph 3
Emergency Math Certificates Issued



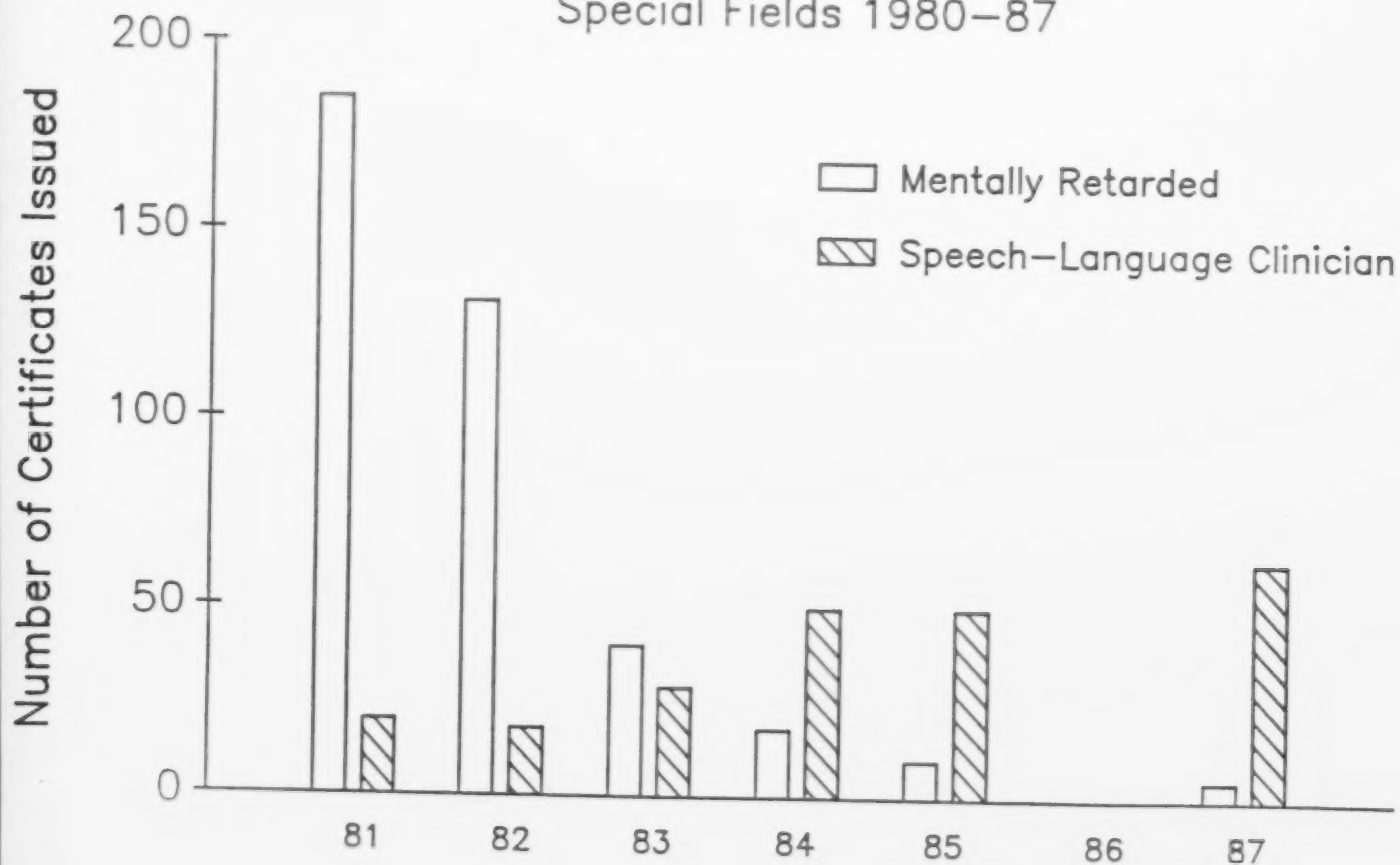
Graph 4
Number of Emergency Science
Certificates Issued



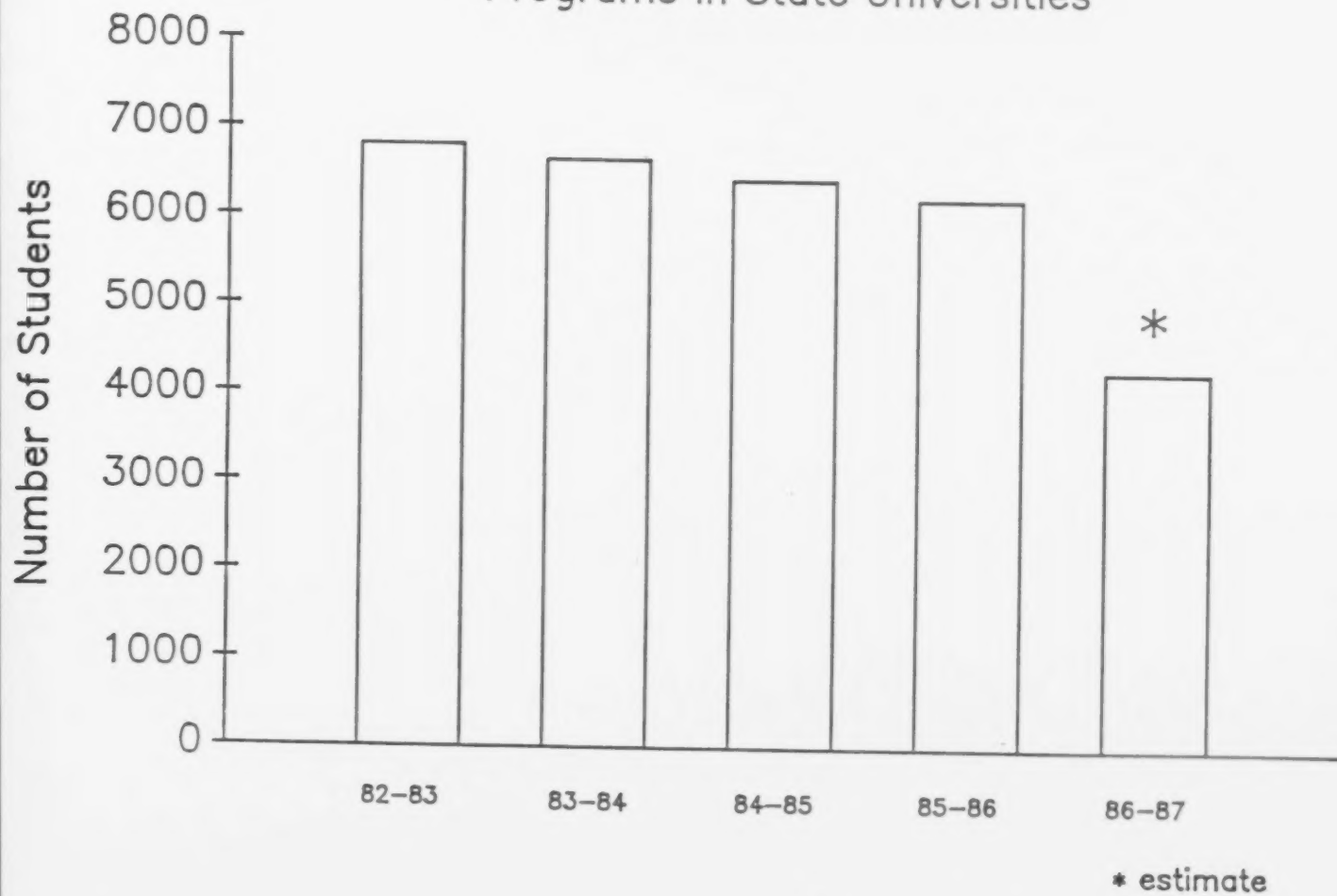
Graph 5
Emergency Certificates Issued in
Special Fields 1980-87



Graph 6
Emergency Certificates Issued in
Special Fields 1980-87

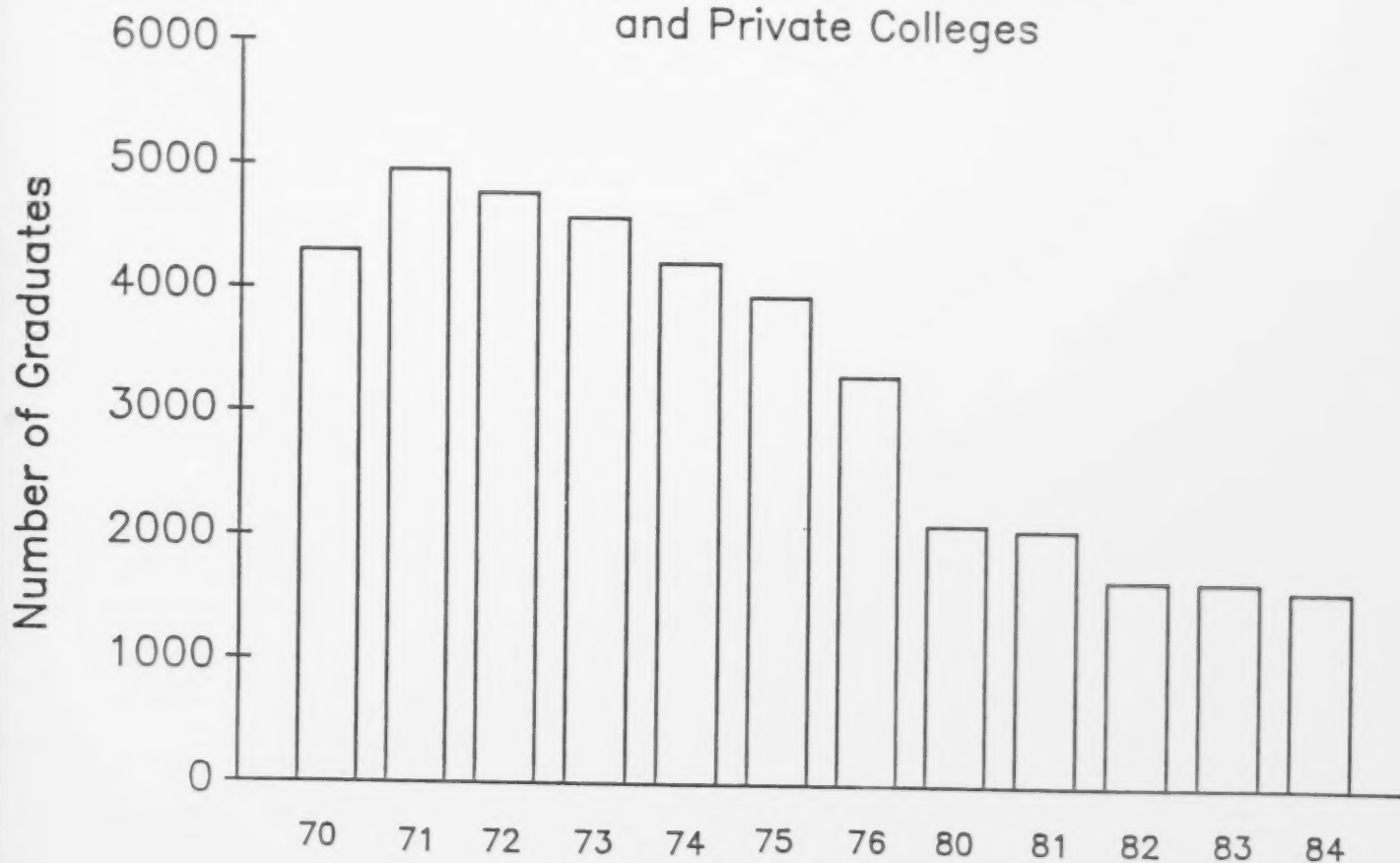


Graph 7
Number of Persons Enrolled in Education
Programs in State Universities

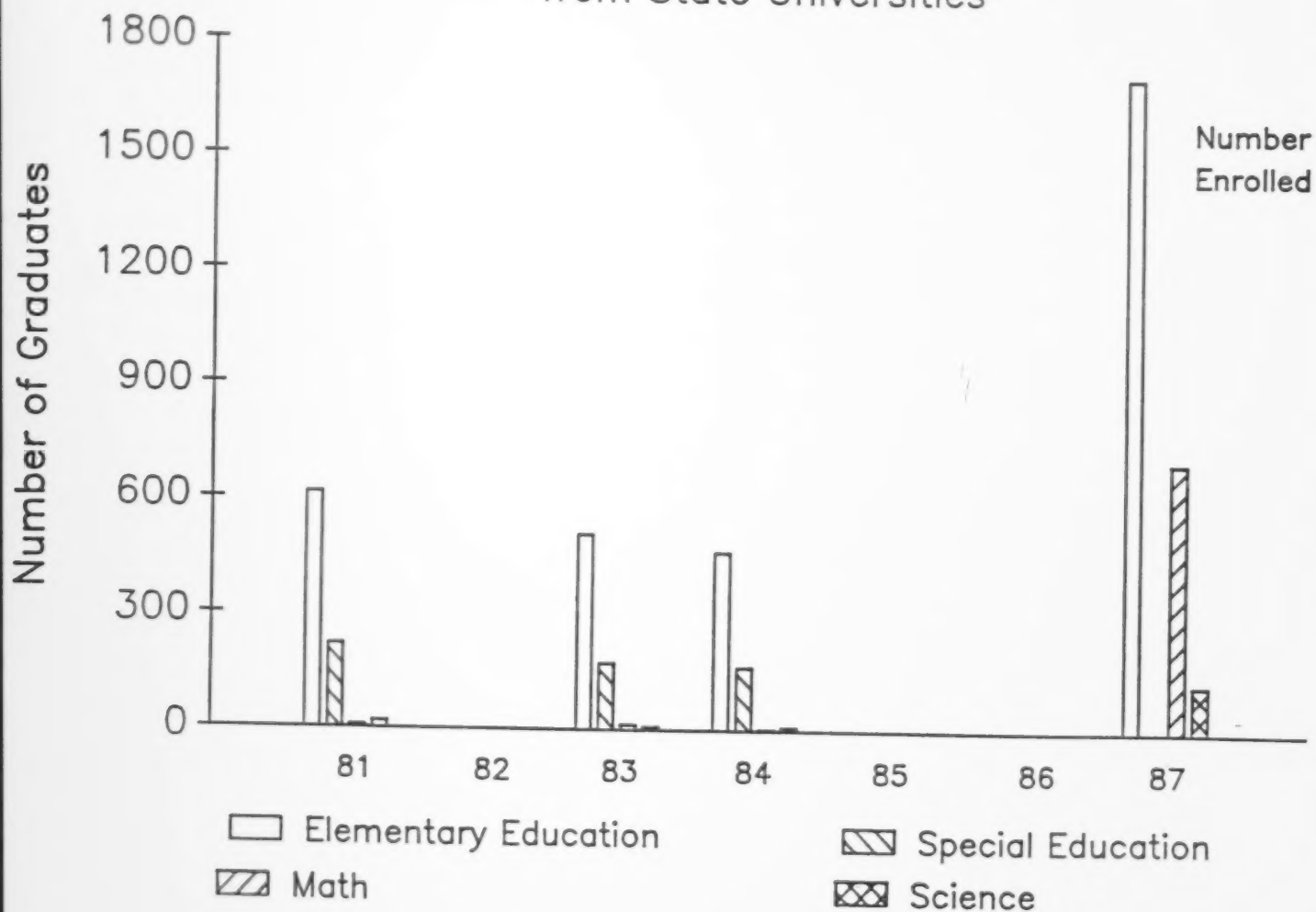


Graph 8

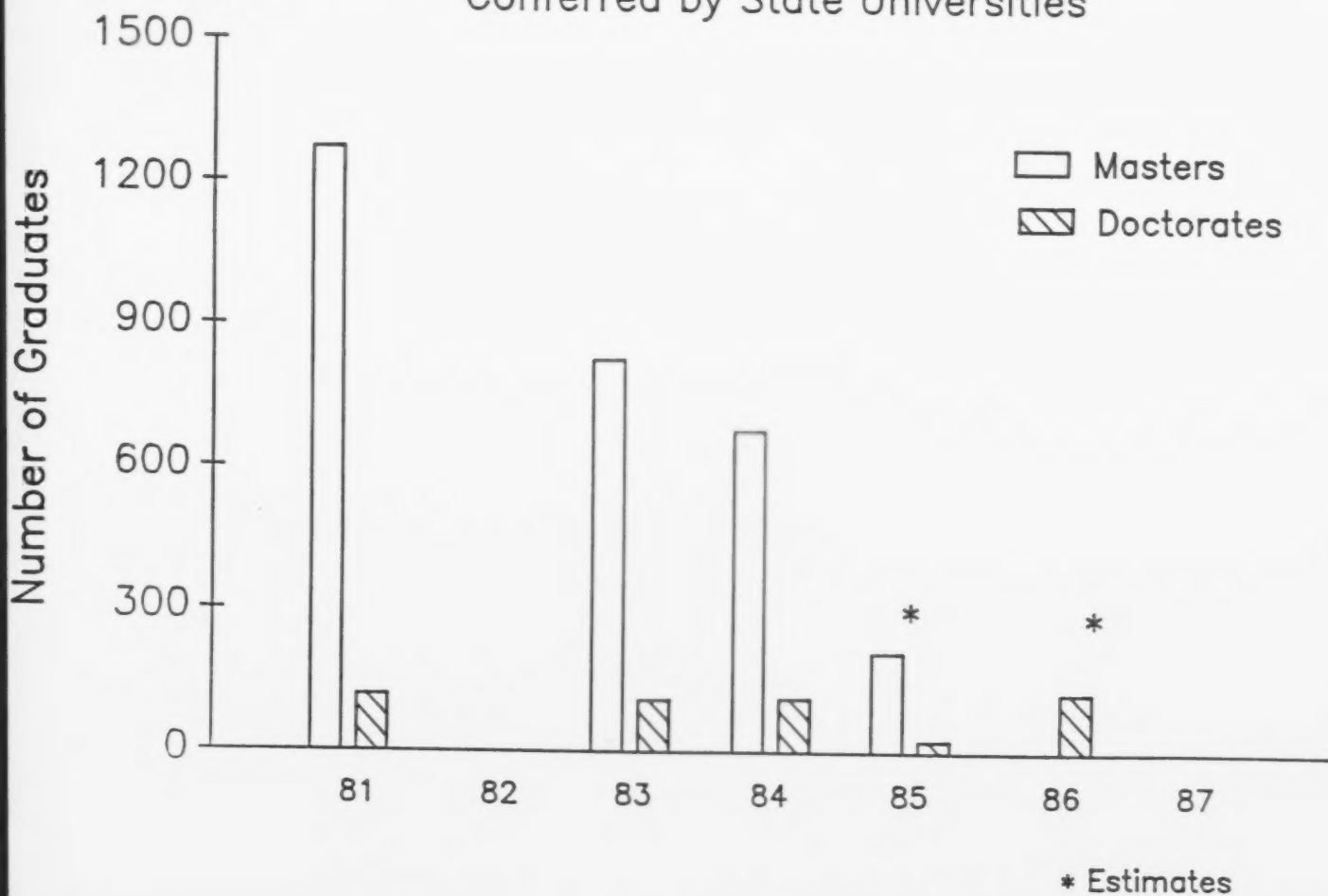
Number of Graduates from Education
Programs in State Universities
and Private Colleges



Graph 9
Number of Graduates with B.A.
from State Universities

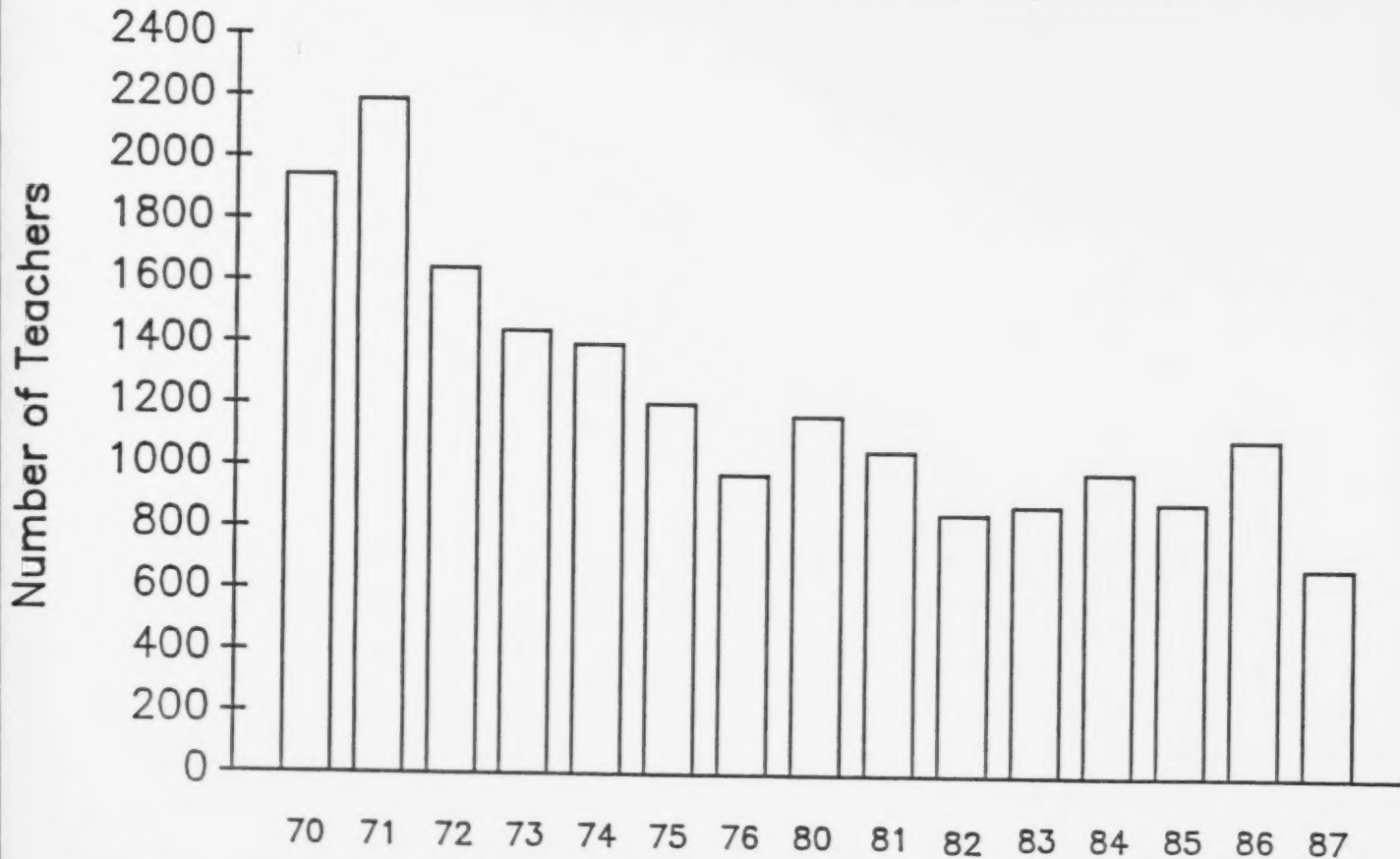


Graph 10
Number of Graduate Education Degrees
Conferred by State Universities



Graph 11

Number of Teachers Employed
with Zero Years Teaching Experience



Graph 12

Number of Teachers with 30 Years
or more Teaching Experience

